

REMARKS

Applicants have amended claims 1-2 and 7-14, and have canceled claims 3-6, during prosecution of this patent application. Applicants are not conceding in this patent application that said amended and canceled claims are not patentable over the art cited by the Examiner, since the claim amendments and cancellations are only for facilitating expeditious prosecution of this patent application. Applicants respectfully reserve the right to pursue said amended and canceled claims, and other claims, in one or more continuations and/or divisional patent applications.

The Examiner rejected claims 1-2 and 7-24 under 35 U.S.C. § 102(a) as allegedly being anticipated by Flaherty, John, "Selected Excel Basics, Excel Tips for Efficient Spreadsheet Use", Available: http://www.bf.rmit.edu.au/quant/Excel/Excel_Tips.pdf ., available in 1999 (as further evidenced by screen shots provided from Microsoft Excel, copyright 1985-1999).

Applicant respectfully traverses the § 102 rejections with the following arguments.

35 U.S.C. § 102

The Examiner rejected claims 1-2 and 7-24 under 35 U.S.C. § 102(a) as allegedly being anticipated by Flaherty, John, “Selected Excel Basics, Excel Tips for Efficient Spreadsheet Use”, available: http://www.bf.rmit.edu.au/quant/Excel/Excel_Tips.pdf ., available in 1999 (as further evidenced by screen shots provided from Microsoft Excel, copyright 1985-1999).

Applicant next provides two independent arguments to demonstrate that the preceding rejection of claims 1-2 and 7-24 under 35 U.S.C. § 102(a) is not valid. The two independent arguments demonstrate: (1) Flaherty cannot be used as a reference to support the rejection; and (2) Flaherty does not anticipate claims 1-2 and 7-24.

Flaherty Cannot Be Used as Reference Under 35 U.S.C. § 102(a)

Applicant respectfully contends that Flaherty cannot be used as a reference to support the rejection of claims 1-2 and 7-24 under 35 U.S.C. § 102(a).

The Examiner cited Flaherty as a printed publication that allegedly anticipates claims 1-2 and 7-24 under 35 U.S.C. § 102(a). However with respect to a printed publication, 35 U.S.C. § 102(a) recites: “person shall be entitled to a patent unless ... the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, **before the invention thereof by the applicant for patent**” (emphasis added). Therefore, a printed publication can be used as a description of an invention only if the publication was published before the invention and certainly before the filing date of the patent application associated with the invention.

The Examiner has offered no proof that Flaherty was published before the filing date,

namely 11/27/2001, of the present patent application. Therefore, Flaherty cannot be used as a printed publication to anticipate claims 1-2 and 7-24 under 35 U.S.C. § 102(a).

The Examiner alleges that the Screen Shots allegedly associated with the 1999 version of Microsoft Excel evidences that Flaherty was publically available in 1999. Specifically in “Response to Arguments”, the Examiner argues: “Examiner has provided various screen shots of Microsoft Excel (copyright in 1999) to prove that the features disclosed in Flaherty reference were disclosed in 1999 as well as outlined these features above. Each of the screenshots provided in the last office action correlate to the figures in the Flaherty reference. For example: -The second figure on page 2 of Flaherty corresponds to the figure on page 3 of the screenshots. -The first figure on page 3 of Flaherty corresponds to the figure on page 4 of the screenshots. -The second figure on page 3 of Flaherty corresponds to the figure on page 5 of the screenshots. -The second figure on page 4 of Flaherty corresponds to the figure on page 6 of the screenshots. -The first figure on page 5 of Flaherty corresponds to the figure on page 7-9 of the screenshots. -The third figure on page 5 of Flaherty corresponds to the figure on page 10 of the screenshots. -The last figure on page 11 of Flaherty corresponds to the figure on page 11 of the screenshots. -The second figure on page 12 of Flaherty corresponds to the figure on page 12 of the screenshots”.

In response, Applicant respectfully contends that evidence **allegedly** showing that features described in Flaherty were known in 1999 is not evidence showing that Flaherty was published in 1999. Applicant asserts that even if the Examiner could prove that the content disclosed in Flaherty was known or used 3000 years ago, Flaherty still could not be used as a printed publication to anticipate claims 1-2 and 7-24, because the Examiner has offered no proof that Flaherty was published before the filing date of 11/27/2001 of the present patent application.

Applicants respectfully contend that the Examiner is incorrectly applying 35 U.S.C. § 102(a) to Flaherty. The issue is not when content in Flaherty was publically known before Applicant's filing date of 1/27/2001, but rather the issue is whether Flaherty was published before Applicant's filing date of 1/27/2001.

Therefore, Applicant asserts that Flaherty cannot be used as a reference to support the rejection the rejection of claims 1-2 and 7-24 under 35 U.S.C. § 102(a) and should be withdrawn.

In addition, Applicant asserts that the particular screen shots of Screen Shots that the Examiner relies on have no legal credibility as evidence. The Examiner describes said particular screen shots of Screen Shots as being "provided from Microsoft Excel, Copyright 1985-1999", which is vague and indefinite. Applicant acknowledges that the screen shot showing "About Microsoft Excel" evidences that Microsoft Excel 2000 has a copyright date of 1985-1999. However, said particular screen shots of Screen Shots relied upon by the Examiner have no indicated date thereon and the Examiner has not cited any source from which said particular screen shots of Screen Shots were extracted. Therefore, said particular screen shots of Screen Shots relied upon by the Examiner is not legally credible evidence.

Accordingly, Applicant reiterates that Flaherty cannot be used as a reference to support the rejection the rejection of claims 1-2 and 7-24 under 35 U.S.C. § 102(a) and should be withdrawn.

Flaherty Does Not Anticipate Claims 1-2 and 7-24

With respect to Screen Shots, the Examiner in "Response to Arguments" states:

“Specifically, when a claimed machine is disclosed identically by the reference, an additional reference may be relied upon to show that the primary reference has an "enabled disclosure". Also, an extra reference or evidence can be used to show an inherent characteristic of the thing taught by the primary reference. Such is the case here. The Microsoft Excel 2000 screen shots are evidence that the teachings of the primary reference were an inherent characteristic of the spreadsheet.”

In response, Applicant respectfully contends that the Microsoft Excel 2000 screen shots are not evidence that the teachings of Flaherty were an inherent characteristic of the spreadsheet, but rather are being used by the Examiner to **allegedly** show that the teachings of Flaherty relied upon by the Examiner were known in 1999.

In any event, the Examiner is not alleging that claim 1 is anticipated by Screen Shots. Accordingly, Applicant will disregard Screen Shots in discussing the rejection of claim 1 as allegedly anticipated by Flaherty under 35 U.S.C. § 102(a) , since it is the content Flaherty and not the content of Screen Shots that is pertinent to the Examiner’s ground for rejecting claim 1 under the alleged anticipation by Flaherty.

Applicant respectfully contends that Flaherty does not anticipate claim 1, because Flaherty does not teach each and every feature of claim 1.

Applicant respectfully contends that Flaherty does not teach the feature: “selecting the range of cells, said range comprising a plurality of sample cells and one or a plurality of empty cells, wherein **prior to said selecting** each sample cell contains a sample value ...; **after said selecting**, ordering the sample cells ...; and **after said ordering**, processing the empty cells

comprising ... computing the value y_i of the empty cell according to the values y_{previous} contained in the selected one or plurality of previous sample cells, and the values y_{next} contained in the selected one or plurality of next sample cells” (emphasis added).

The Examiner argues that Flaherty discloses “[e]ntering a data series with specific start and stop values entered for a data series. For example cell A2 may contain a start value of 10 and a stop value of 90 is indicated with a step value of 5. See pages 4-5, "Entering a Data Series". In indicating a start and stop value in a series of cells, the "previous sample cell" and "next sample cell" of the empty cells in between the start value and stop value are specified.”

In response, Applicant respectfully contends that in Flaherty the start value of 10 and the stop value of 90 in the Series dialogue box is indicated in Flaherty, page 5. Flaherty does not anywhere teach that the start value of 10 and the stop value of 90 (which are the sample values) are placed in cells of the spreadsheet **prior to** selecting the range of cells, as required by claim 1.

In claim 1, the quoted phrases “**prior to said selecting**”, “**after said selecting**”, and “**after said ordering**” require that the sample cells containing their respective sample values must be in the spreadsheet **before the range of cells is selected**, which Flaherty does not teach.

Applicant points out that the words “sample cell” and “empty cell” used in said computing y_i are subject to the requirement of: “wherein **prior to said selecting** each sample cell contains a sample value and an empty cell contains no value or a value not considered as a sample value”.

In contrast, in the example in pages 4-5 of Flaherty, Step 1 fills the cell A1 with the starting value of 10. Step 2 enters the step value of 5 and the stop value of 90 into a dialog box shown in the Figure at the top of page 5 of Flaherty to “select the range of cells to fill”. Step 3

selects the Fill command which generates the filled-in cells A1, A2, ..., A17 shown in the Figure at the top of page 5 of Flaherty.

Thus, Flaherty teaches selecting the range of cells in Step 2 **before** the sample values are placed in the spreadsheet in Step 3, which is the **exact opposite** of what claim 1 requires.

In “Response to Arguments”, the Examiner argues: “The dialog box represents the spreadsheet cells. In other words, the claim does not necessarily require that the values be generated from within the cells of the spreadsheet but rather that the values be generated and processed for empty cells which is what the dialog box does. Using the dialog box, the cells A2-A17 can be filled in with values based on previous cell value and next cell value as depicted in the EXCEL screenshots on pages 8-9 and also in Flaherty on page 5.”

In response, Applicants respectfully contend that preceding argument by the Examiner is not persuasive, because claim 1 requires that the sample values be contained in the sample cells of the spreadsheet **before** the range of cells is selected, which Flaherty does not teach.

In addition, Flaherty does not disclose an algorithm for generating the filled-in cells A1, A2, ..., A17 shown in the Figure at the top of page 5 of Flaherty. Therefore, Flaherty does not disclose computing a value for any of the empty cells A2, ..., A17 according to a value (y_{previous}) contained in **a previous cell** and a value (y_{next}) contained in **a next cell**. In fact, a simple algorithm to fill in the empty cells for the Flaherty’s example is to use **only previous cell values** by using such C-language code as:

for ($i = 2$; $i=18$; $i++$) $A_i = A_{i-1} + 5$;

Based on the preceding arguments, Applicant respectfully maintains that Flaherty does

not anticipate claim 1, and that claim 1 is in condition for allowance. Since claims 2 and 7-24 depend from claim 1, Applicant contends that claims 2 and 7-24 are likewise in condition for allowance.

In addition, with respect to claim 2, Flaherty does not teach the feature: “wherein said step of computing the value y_i of each empty cell according to the values y_{previous} contained in the selected one or plurality of previous sample cells, and the values y_{next} contained in the selected one or plurality of next sample cells, comprises the further step of: computing the value y_i of the empty cell according to the values x_{previous} associated with the content y_{previous} of the selected one or plurality of previous sample cells, and the values x_{next} associated with the content y_{next} of the selected one or plurality of next sample cells.”

The Examiner argues: “In reference to claim 2, Flaherty teaches entering a data series with specific start and stop values entered for a data series. For example cell A2 may contain a start value of 10 and a stop value of 90 is indicated with a step value of 5. See pages 4-5, "Entering a Data Series". In indicating a start and stop value in a series of cells, the "previous sample cell" and "next sample cell" of the empty cells in between the start value and stop value are specified.”.

In response, Applicant the preceding argument by the Examiner does not demonstrate a teaching by Flaherty of the preceding feature of claim 2, because the preceding algorithm in Flaherty stated by the Examiner uses y -values in computing the value y_i of each empty cells, but does not use x -values as required by claim 2.

Accordingly, Flaherty does not anticipate claim 2.

In addition, with respect to claim 8, Flaherty does not teach the feature: “wherein the step of computing the value y_i of an empty cell comprises the step of computing the value y_i as equal to:

$$y_i = y_{\text{previous}} + (x_i - x_{\text{previous}}) * ((y_{\text{next}} - y_{\text{previous}}) / (x_{\text{next}} - x_{\text{previous}}))$$

where :

y_{previous} is the content of a previous cell containing a sample;

x_{previous} is the value of the variable x associated with the content of the previous cell containing a sample;

y_{next} is the content of a following cell containing a sample;

x_{next} is the value of the variable x associated with the content of a following cell containing a sample;

x_i is the value of the variable x associated with the empty cell.”

The Examiner argues: “In reference to claim 8, Flaherty teaches the value of y_i is calculated by determining the pattern in the range of cells. This entails determining content of a previous/start cell and next/stop cell and the value associated with the content in order to determine the value of the empty cell. For example, content and value of a previous/start cell and a next/stop cell are used to calculate what goes into an empty cell. See pages 4-5, "Entering a Data Series".”.

In response, Applicant asserts Flaherty does not anywhere teach use of the formula: $y_i = y_{\text{previous}} + (x_i - x_{\text{previous}}) * ((y_{\text{next}} - y_{\text{previous}}) / (x_{\text{next}} - x_{\text{previous}}))$ as required by claim 8.

Accordingly, Flaherty does not anticipate claim 8.

In addition, with respect to claim 9, Flaherty does not teach the feature: “wherein said

selected range of cells comprises a double column or double row range of cells, said range of cells comprising $2N$ cells, wherein the i -th cell in a first column or first row comprises a value x_i and the second column or second row comprises a value $y_i = f(x_i)$.”

The Examiner argues: “In reference to claim 9, Conlon discloses a means in which a selected range of cells comprises a single column and row of cells. See Flaherty figures on pages 1-2 and the corresponding EXCEL screen shot on page 3. Each cell comprises a value.”.

In response, Applicant respectfully contends that the Examiner’s argument is not persuasive, because neither “a double column” nor “a double row” reads on “a single column and row”.

Accordingly, Flaherty does not anticipate claim 9.

In addition, with respect to claim 10, Flaherty does not teach the feature: “wherein the step of filling cells comprises the further step of: defining a table and associating said table with the selected range of cells, said table comprising for each empty cell i :

- an “index field” for identifying said empty cell;
- a “sample field” for indicating that said cell is an empty cell;
- a “ X_i field” with the value x_i associated with said empty cell;
- an “index of previous sample field” with the value of the “index field” of a previous record having a sample value;
- a “ X_{prev} . sample field” with the value of the “ X_i field” of a previous record having a sample value;
- a “ $f(X_{prev} \text{ sample})$ field” with a value $y = f(x)$ of a cell in the range corresponding to a previous record having a sample value;
- an “index of next sample field” with a value of the “index field” of a next record having a

sample value;

a “X_{next} sample field” with a value of the “X_i field” of a next record having a sample value;

a “f(X_{next} sample) field” with a value $y = f(x)$ of a cell in the range corresponding to a next record having a sample value.”

The Examiner argues that Flaherty teaches such a table, but does not cite any such table in Flaherty having the 9 recited fields.

Applicant asserts that Flaherty does not teach any such table having the 9 recited fields.

Accordingly, Flaherty does not anticipate claim 10.

In addition, with respect to claim 11, Flaherty does not teach the feature: “wherein said table further comprises for each sample cell i:

an “index field” for identifying said sample cell;

a “sample field” for indicating that said cell is a sample cell;

a “X_i field” with the value x_i associated with said sample cell;

the “index of previous sample field” with the value of the “index field” of said sample cell;

a “X_{prev.} sample field” with the value of the “X_i field” of said sample cell;

the “f(X_{prev.} sample) field” with the value $y = f(x)$ of said sample cell;

the “index of next sample field” with the value of the “index field” of said sample cell;

the “X_{next} sample field” with the value of the “X_i field” of said sample cell;

the “f(X_{next} sample) field” with the value $y = f(x)$ of said sample cell.”

The Examiner argues that Flaherty teaches the preceding recited fields in the table, but does not cite and such teaching of the recited fields of any table in Flaherty.

In response, Applicant asserts that Flaherty does not teach the recited fields in any table.

Accordingly, Flaherty does not anticipate claim 11.

In addition, with respect to claim 22, Flaherty does not teach the feature: “further comprising designating the selected range of cells as a persistent sampled range of cells (PSROC).”

The Examiner argues: “In reference to claim 22, Flaherty teaches a user can initiate a data series by entering a start value and an end value for a range of cells with a specified step value. By initiating the series dialogue box, a user may change the sample values or step values (i.e. start and stop values) thereby adding or deleting a sample cell or empty cell. See pages 4-5, "Entering a Data Series".”

In response, Applicant asserts that the preceding argument by the Examiner has no relevance to the preceding feature of claim 22.

Accordingly, Flaherty does not anticipate claim 22.

In addition, with respect to claim 23, Flaherty does not teach the feature: “wherein a background color of the selected range of cells is a first color before said designating the selected range of cells as a PSROC, and wherein after said designating the selected range of cells as a PSROC the method further comprises changing the background color of the selected range of cells to a second color that differs from the first color”.

The Examiner alleges that “Flaherty teaches custom formatting of cells where a user can indicate a range of cells and font, border, pattern, and background information. See page 12.”

In response, Applicant notes that Flaherty, page 12 is totally silent as to the use of color for any purpose.

Accordingly, Flaherty does not anticipate claim 23.

In addition, with respect to claim 24, Flaherty does not teach the feature: “wherein for at least one empty cell of said empty cells:

said one or a plurality of previous sample cells consists of said plurality of previous sample cells,

said one or a plurality of next sample cells consists of said plurality of next sample cells, or

said one or a plurality of previous sample cells consists of said plurality of previous sample cells and said one or a plurality of next sample cells consists of said plurality of next sample cells.”

The Examiner argues: “In reference to claim 24, Flaherty teaches entering a data series with specific start and stop values entered for a data series. For example cell A2 may contain a start value of 10 and a stop value of 90 is indicated with a step value of 5. See pages 4-5, "Entering a Data Series". In indicating a start and stop value in a series of cells, the "previous sample cell" and "next sample cell" of the empty cells in between the start value and stop value are specified.”

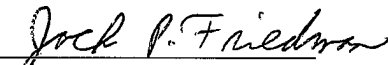
In response, Applicant asserts that the preceding argument by the Examiner has no relevance to the preceding feature of claim 24 which requires that use of plurality of previous sample cells, plurality of next sample cells, or use of both a plurality of previous sample cells and a plurality of next sample cells for computing y_i at the at least one empty cell.

Accordingly, Flaherty does not anticipate claim 24.

CONCLUSION

Based on the preceding arguments, Applicant respectfully believes that all pending claims and the entire application meet the acceptance criteria for allowance and therefore request favorable action. If the Examiner believes that anything further would be helpful to place the application in better condition for allowance, Applicant invites the Examiner to contact Applicant's representative at the telephone number listed below. The Director is hereby authorized to charge and/or credit Deposit Account 09-0457 (IBM).

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